

Application No. 10/668,537
Docket No. 14374.106
Reply to Office Action mailed February 4, 2005

CLAIMS AMENDMENTS

Please add new claims 27-36. No new matter is believed to be entered as a result of the aforementioned amendments. The following listing of claims replaces all previous claim listings.

1. **(Original)** A component suitable for use in an x-ray device, the component comprising:

 a body substantially comprised of metal; and

 an emissive coating disposed on at least a portion of the body, the coating substantially comprising an inorganically bonded ceramic.
2. **(Original)** The component as recited in claim 1, wherein the body substantially comprises stainless steel.
3. **(Original)** The component as recited in claim 1, wherein the emissive coating includes an oxide filler.
4. **(Original)** The component as recited in claim 1, wherein the emissive coating is dielectric.
5. **(Original)** The component as recited in claim 1, wherein when the emissive coating is in an uncured state, the emissive coating is substantially free of volatile organic compound emissions.
6. **(Original)** The component as recited in claim 1, wherein when the emissive coating is in an uncured state, the emissive coating takes the form of a slurry suitable for application to the component by spraying.

Application No. 10/668,537
Docket No. 14374.106
Reply to Office Action mailed February 4, 2005

7. **(Original)** The component as recited in claim 1, wherein when the emissive coating has an emissivity of about 0.6 or higher.

8. **(Original)** The component as recited in claim 1, wherein when the emissive coating has an emissivity of about 0.2 or lower.

9. **(Original)** The component as recited in claim 1, wherein the emissive coating substantially prevents oxidation of the coated portion of the body at body temperatures of up to about 1450 degrees F.

10. **(Original)** The component as recited in claim 1, wherein the emissive coating substantially prevents corrosion of the coated portion of the body at body temperatures of up to about 1450 degrees F.

11. **(Original)** A vacuum enclosure for use in an x-ray device, the vacuum enclosure comprising:

a metal body defining an inner surface and an outer surface; and

an emissive coating disposed on a portion of at least one of the surfaces defined by the metal body, the emissive coating substantially comprising an inorganically bonded ceramic.

12. **(Original)** The vacuum enclosure as recited in claim 11, wherein the metal body substantially comprises stainless steel.

13. **(Original)** The vacuum enclosure as recited in claim 11, wherein the emissive coating is disposed on a substantial portion of the inner surface of the metal body.

Application No. 10/668,537
Docket No. 14374.106
Reply to Office Action mailed February 4, 2005

14. **(Original)** The vacuum enclosure as recited in claim 11, wherein the metal body is configured for use with a rotating anode.

15. **(Original)** The vacuum enclosure as recited in claim 11, wherein the metal body is configured for use with a stationary anode.

16. **(Original)** The vacuum enclosure as recited in claim 11, wherein the emissive coating includes an oxide filler.

17. **(Original)** The vacuum enclosure as recited in claim 11, wherein the emissive coating is dielectric.

18. **(Original)** The vacuum enclosure as recited in claim 11, wherein the emissive coating substantially prevents oxidation of the coated portion of the body at body temperatures of up to about 1450 degrees F.

19. **(Original)** The vacuum enclosure as recited in claim 11, wherein the emissive coating substantially prevents corrosion of the coated portion of the body at body temperatures of up to about 1450 degrees F.

20. **(Original)** A vacuum enclosure for use in an x-ray device, the vacuum enclosure comprising:

a stainless steel body defining an inner surface and an outer surface; and

an emissive coating disposed on at least a portion of the inner surface defined by the stainless steel body, the emissive coating substantially comprising an inorganically bonded ceramic having an oxide filler.

Application No. 10/668,537
Docket No. 14374.106
Reply to Office Action mailed February 4, 2005

21. **(Original)** The vacuum enclosure as recited in claim 20, wherein when the emissive coating is in an uncured state, the emissive coating is substantially free of volatile organic compound emissions.

22. **(Original)** The vacuum enclosure as recited in claim 20, wherein when the emissive coating is in an uncured state, the emissive coating takes the form of a slurry suitable for application to the vacuum enclosure by spraying.

23. **(Original)** The vacuum enclosure as recited in claim 20, wherein when the emissive coating has an emissivity of about 0.6 or higher.

24. **(Original)** The vacuum enclosure as recited in claim 20, wherein the emissive coating substantially prevents oxidation of the coated portion of the vacuum enclosure at vacuum enclosure temperatures of up to about 1450 degrees F.

25. **(Original)** The vacuum enclosure as recited in claim 20, wherein the emissive coating substantially prevents corrosion of the coated portion of the vacuum enclosure at vacuum enclosure temperatures of up to about 1450 degrees F.

26. **(Original)** The vacuum enclosure as recited in claim 20, wherein the emissive coating takes the form of a porous free ceramic composite.

Application No. 10/668,537
Docket No. 14374.106
Reply to Office Action mailed February 4, 2005

27. (New) A vacuum enclosure for use in an x-ray device, the vacuum enclosure comprising:

a first portion substantially comprised of metal, and a first emissive coating disposed on the first portion, the first coating substantially comprising an inorganically bonded ceramic having a first degree of emissivity; and

a second portion attached to the first portion and substantially comprised of metal, a second emissive coating disposed on the second portion, the second coating substantially comprising an inorganically bonded ceramic having a second degree of emissivity that is less than the first degree of emissivity.

28. (New) The vacuum enclosure as recited in claim 27, wherein when the first and second emissive coatings are in an uncured state, the emissive coatings are substantially free of volatile organic compound emissions.

29. (New) The vacuum enclosure as recited in claim 27, wherein when the first and second emissive coatings are in an uncured state, the emissive coatings take the form of a slurry suitable for application to the first and second components of the vacuum enclosure by spraying.

30. (New) The vacuum enclosure as recited in claim 27, wherein the first emissive coating has an emissivity of about 0.6 or higher.

31. (New) The vacuum enclosure as recited in claim 27, wherein the second emissive coating has an emissivity of about 0.2 or lower.

32. (New) The vacuum enclosure as recited in claim 27, wherein the first and second emissive coatings substantially prevent oxidation of the first and second coated components of the vacuum enclosure at vacuum enclosure temperatures of up to about 1450 degrees F.

Application No. 10/668,537
Docket No. 14374.106
Reply to Office Action mailed February 4, 2005

33. (New) The vacuum enclosure as recited in claim 27, wherein the first and second emissive coatings substantially prevent corrosion of the first and second coated components of the vacuum enclosure at vacuum enclosure temperatures of up to about 1450 degrees F.

34. (New) The vacuum enclosure as recited in claim 27, wherein the first and second emissive coatings take the form of porous free ceramic composites.

35. (New) The vacuum enclosure as recited in claim 27, wherein the first portion of the vacuum enclosure comprises part of an exterior surface of the vacuum enclosure.

36. (New) The vacuum enclosure as recited in claim 27, wherein the second portion of the vacuum enclosure comprises part of an interior surface of the vacuum enclosure.